



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,079	11/25/2003	Ryuichi Iwamura	SON5180.34A1	7890

36813 7590 05/17/2006

O'BANION & RITCHEY LLP/ SONY ELECTRONICS, INC.  
400 CAPITOL MALL  
SUITE 1550  
SACRAMENTO, CA 95814

EXAMINER

SALTARELLI, DOMINIC D

ART UNIT	PAPER NUMBER
----------	--------------

2623

DATE MAILED: 05/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/723,079	<b>Applicant(s)</b> IWAMURA, RYUICHI	
	<b>Examiner</b> Dominic D. Saltarelli	<b>Art Unit</b> 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2006.  
 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-54 and 59-62 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1-54 and 59-62 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All b) ☐ Some \* c) ☐ None of:  
 1. ☐ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed March 27, 2006 have been fully considered but they are not persuasive.

First applicant argues that there is no discussion, teaching, suggestion, or motivation provided by Edson for any network devices coupled to the gateway to pass commands received from a remote control device through itself on to the network in response to recognizing that the command does not match commands specific to that network device, claiming the examiner admits to the shortcomings of the Edson reference (applicant's remarks, page 16, lines 3-8).

In response, it must first be noted that the shortcoming of Edson recognized by the examiner is the lack of a clear teaching in Edson for the *means* for rerouting a command, as claimed, and not the broader function of rerouting commands received from a remote control that are not specific to the network device which receives them. In Edson, col. 11, lines 20-40 and col. 15, lines 29-48, Edson clearly teaches receiving commands in one networked device that are intended for another device, and are thus sent over the network to the remote device. It cannot be said Edson does not, at the very least, suggest, passing commands received from a remote control device through itself on to the network in response to recognizing that the command does not match commands specific to that network device. The introduction of the Streck

reference is to show that the claimed *means* for rerouting commands is known in the art.

Second, applicant argues that Streck is directed to rebroadcasting all commands received from remote control unit into an RF output through a separate device, thus the signal is not routed through the first media device and the routing is not in response to recognizing that said command does not match commands specific to the first media device (applicant's remarks, page 16, lines 15 through page 17 line 15).

In response, the first limitation of routing commands "through the first media device" is admittedly met by the Streck reference, as applicant points to fig. 11 which clearly shows the circuitry which performs the rerouting of commands to be contained within the television itself. The second limitation is also met by Streck because of the fact that the rerouting circuitry is incorporated into the network device (television) as illustrated in fig. 11. As shown in fig. 11, each device has only one antenna, and if those commands intended for a television and received by a television (see Streck, col. 9, lines 50-55) were instead indiscriminately routed to the antenna for wireless broadcast, as stated by applicant, it would be impossible to control the television, as a second antenna would be required to simultaneously receive the wirelessly broadcast signal for routing to the function control circuit of the television. This is clearly not the case, as it is perfectly clear to any person of ordinary skill in the art from

reading the Streck reference that a TV which receives commands intended for the TV and not the remote VCR would simply recognize and process said commands accordingly, and not rebroadcast every single command received indiscriminately, leading to an inability to control the functions of the TV.

Third, applicant argues that Streck only teaches the general concept of controlling remote devices using a remote control, and thus cannot be used to teach the specific claimed limitations (applicant's remarks, page 17 line 17 through page 18 line 11).

In response, Streck reference teaches not only the general concept of controlling remote devices using a remote control, but also goes into sufficient detail describing several specific embodiments for implementing the general concept in practice (see Streck, figs. 10-23 and col. 6-11). It is the teachings of implementing specific circuitry for rerouting received remote control commands incorporated into a television that are the teachings which are incorporated into the primary reference, not a "general concept" broader in scope than the claimed limitations, as suggested by applicant.

Fourth, applicant argues that the claimed embodiments of the instant application solve a different problem in a new way, pointing to the disclosure of the instant application for support (applicant's remarks, page 18 line 21 through page 19 line 2).

In response, applicant's argument fails to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Fifth, applicant argues that the proposed combination of Edson in view of Streck changes and operating principles of the Edson reference and renders the Edson reference unsuited for its intended purpose (applicant's remarks, page 19).

In response, the examiner simply respectfully disagrees with applicant's assertions. The Edson reference provides a system for the intercommunication and control of networked devices over a PLC network. The Edson reference, as cited, teaches the capability for receiving commands in one networked device that are intended for another device, which are thus sent over the network to the remote device (see Edson, col. 11, lines 20-40 and col. 15, lines 29-48), and the only difference between the claimed invention and the Edson reference is a particular means by which this capability is implemented, as the Edson reference is simply silent on exactly how the disclosed capability is implemented in a system, because said function could be implemented any number of ways depending on the nature of the networked devices, and this level of detail is one with which Edson is simply unconcerned. Streck remedies this deficiency by disclosing particular means for rerouting commands through a media device received from a remote control over a communications medium. In Edson, this

communications medium is the PLC network. When the Edson disclosure is modified in view of Streck to incorporate a particular means for rerouting commands, there is no change, whatsoever, to either the operating principles or to the ability to serve its intended purpose.

Sixth, applicant argues that impermissible hindsight was used by the examiner (applicant's remarks, page 20, lines 1-12).

In response, examiner must note that this argument is based upon the validity of previous arguments, most notably that of Streck teaching the indiscriminate broadcasting of commands from a remote control thus not teaching claimed limitation of selective rerouting of commands. However, as shown above, Streck clearly does not teach indiscriminate broadcasting of commands, and the examiner also disagrees with each of the cited "numerous shortcomings" alleged by applicant, as described in the preceding paragraphs. Therefore the examiner must also disagree with applicant's conclusion that impermissible hindsight was relied upon.

Seventh, applicant argues that there is a lack of specificity in the support provided for the combination (applicant's remarks, page 20, lines 19-27).

In response, the cited portion of Streck, col. 6 line 24 – col. 7 line 3, is in no way merely a recitation of a generalized concept, as said section provides specific teachings for implementing a system for controlling a VCR by routing

commands for the VCR through a television. The necessary modification to the disclosed transmitter of Streck would be replacement of the antenna for broadcasting and receiving the electrical signals over free space with transceivers for broadcasting and receiving the electrical signals over the PLC network disclosed by Edson. Other than this, the only modifications to be made would be programming adjustments to ensure message format compatibility with the system taught by Edson, a feature suggested at by Streck in col. 6, lines 63-68, which teaches appending additional information to a command to route it to a particular device.

Eighth, applicant argues that the invention was not considered as a whole by the examiner (applicant's remarks, page 21).

In response, the examiner respectfully disagrees. The invention as a whole was considered when the rejection was made. The Edson reference teaches each claimed limitation in addition to the scope and thrust of the invention as described in applicant's specification (namely, the ability of one networked media device to control another networked device over a PLC network), and is only silent on the particular means by which commands are rerouted from a remote control through said media device. This deficiency is remedied by the Streck reference, which teaches the claimed means was known in the art for performing the described functionality of controlling devices over a network found in Edson.

Ninth, applicant argues that the examiner has failed to establish a *prima facie* case of obviousness, citing no motivation to combine the references and not all claim limitations have been taught (applicant's remarks, page 21 line 24 through page 22 line 10).

In response, the examiner must note that this is a broad conclusory statement which relies entirely upon the validity of previous arguments. Given that the examiner has addressed these arguments, and summarily disagrees with the validity of said arguments, the examiner must also simply rebut applicant's claim that a *prima facie* case of obviousness has not been met.

Further, on pages 22 through 28, applicant merely presents the same arguments addressed above, with respect to claims 2, 40, and 48.

Tenth, regarding claim 19, applicant argues that the Edson reference cannot teach the claimed limitations if they have been admittedly not taught in the independent claim (applicant's remarks, page 29).

In response, examiner must note that it is the combination of the Edson and Streck references which teach the claimed limitations of claim 19, which is why the relevant portions of both Edson and Streck were quoted when identifying how the combination met the claimed limitations. Most notably, the only claimed limitation for which Edson is cited in claim 19 is in regard to the server which

routes commands, all other limitations being met by incorporation of the teachings of the Streck reference into the system disclosed by Edson.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-16, 19-21, 27, 40-49, 53, 54, and 59-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edson (6,526,581, of record) in view of Streck et al. (5,045,948, of record) [Streck].

Regarding claim 1, Edson discloses an apparatus for controlling video and audio components distribution over a power line communications (PLC) network (fig. 1, power line 23), comprising:

A server (fig. 1, gateway 13) configured for controlling the communication of video and audio streams between any media devices connected as clients for communicating over said PLC network with said server (col. 4, lines 36-44 and col. 5, lines 25-35, wherein communication between devices is accomplished using router 103, col. 9, lines 52-63 and col. 10, lines 46-65); and

Means for interpreting commands, received from one of said media devices and communicated to said server, and controlling the communication of media content to said media devices and said server in response thereto (using

the gateway 13 as the communications controller, media from a first device is requested by a second device, and displayed on the second device, such as displaying web pages stored on a data device within the in-home network on PC 43, col. 11, lines 20-40).

Edson fails to disclose means for rerouting a command, received by a first media device from a wireless remote control device, through said first media device to said power-line communications (PLC) network in response to recognizing that said command does not match commands specific to said first media device.

In an analogous art, Streck teaches a system for controlling plural devices in a home using a single remote control device (col. 6, lines 24-28) including means for rerouting a command (fig. 10, circuitry contained in unit 60', which reroutes remote control commands from wireless remote control 32, col. 6, line 24 – col. 7 line 3), received by a first media device from a wireless remote control device (fig. 10, wireless remote control device 32) through a home network (as shown in fig. 10, col. 6, lines 5-23) in response to recognizing that said command does not match commands specific to said first media device (col. 9 line 34 – col. 10 line 15, specifically col. 9, lines 50-55 where commands for the local TV are recognized and utilized, while commands for the VCR are rerouted over the network to the remotely located VCR, see also col. 6 line 63 – col. 7 line 3), for the benefit of allowing users to control a remotely located device within a home network from a remote location within the network (col. 6, lines 24-28).

It would have been obvious at the time to a person of ordinary skill in the art to modify the apparatus disclosed by Edson to include means for rerouting a command, received by a first media device from a wireless remote control device, through said first media device over a home network in response to recognizing that said command does not match commands specific to said first media device, as taught by Streck, for the benefit of allowing users to control remotely located devices within a home network from remote locations.

Regarding claim 2, Edson discloses an apparatus for controlling video and audio components distribution over a power line communications (PLC) network (fig. 1, power line 23), comprising:

A server (fig. 1, gateway 13) configured for controlling the communication of video and audio streams between media devices connected for communicating over a PLC network (col. 4, lines 36-44 and col. 5, lines 25-35, wherein communication between devices is accomplished using router 103, col. 9, lines 52-63 and col. 10, lines 46-65);

a first media device configured for communicating with said server over said power-line communications (PLC) network (fig. 1, TV 42 communicates with gateway 13 over power line 23, col. 7, lines 44-57);

A PLC interface (fig. 1, D2 interface 322) coupled to said media device for communicating with said server connected over said PLC network (col. 7 line 58 – col. 8 line 2); and

Programming associated with said server interface for interpreting command codes received over said PLC network from a first media device and controlling the operation of a second media device connected over said PLC network in response to command codes received and interpreted by said server which were received over said PLC network from the first media device (col. 11, lines 20-40 and col. 15, line 29-48).

Edson fails to disclose programming associated with said media device for interpreting a command code from a wireless remote control device, recognizing that the command code does not match commands specific to the said media device, and rerouting said command by passing said command through said power line communications (PCL) interface to said server.

In an analogous art, Streck teaches a system for controlling plural devices in a home using a single remote control device (col. 6, lines 24-28) including means for rerouting a command (fig. 10, circuitry contained in unit 60', which reroutes remote control commands from wireless remote control 32, col. 6, line 24 – col. 7 line 3), received by a first media device from a wireless remote control device (fig. 10, wireless remote control device 32) through a home network (as shown in fig. 10, col. 6, lines 5-23) in response to recognizing that said command does not match commands specific to said first media device (col. 9 line 34 – col. 10 line 15, specifically col. 9, lines 50-55 where commands for the local TV are recognized and utilized, while commands for the VCR are rerouted over the network to the remotely located VCR, see also col. 6 line 63 – col. 7 line 3), for

the benefit of allowing users to control a remotely located device within a home network from a remote location within the network (col. 6, lines 24-28).

It would have been obvious at the time to a person of ordinary skill in the art to modify the apparatus disclosed by Edson to include programming for interpreting a command code from a wireless remote control device, received by a first media device from a wireless remote control device, recognizing that the command code does not match commands specific to the said media device, and rerouting said command by passing said command through a home network, as taught by Streck, for the benefit of allowing users to control remotely located devices within a home network from remote locations.

Regarding claim 3, Edson and Streck disclose the apparatus of claim 2, where said server operates as a media server and media devices configured for communicating with said server over said PLC network operating as clients of said server according to a client-server model (Edson, col. 9, lines 15-20).

Regarding claim 4, Edson and Streck disclose the apparatus of claim 2, wherein said second media device is configured for receiving commands from said server and for transmitting media content over said PLC network to or from said server (Edson teaches devices share resources with each other, col. 8, lines 52-65, where devices request content from other devices and from external networks via the gateway, col. 10, lines 46-65, wherein the TV and VCR devices

send and receive digital signals via the network, col. 7, lines 47-49, and additionally, web page data is stored and transferred from media devices across the network, col. 11, lines 30-40).

Regarding claim 5, Edson and Streck disclose the apparatus of claim 4, wherein said first media device (Edson, fig. 1, TV 42) is configured for responding to commands received from a wireless remote control unit (Streck, fig. 10, wireless remote control 32).

Regarding claim 6, Edson and Streck disclose the apparatus of claim 5, wherein said first media device is configured for receiving commands comprising infrared signals from the wireless remote control unit (Streck, col. 6, lines 45-48).

Regarding claim 7, Edson and Streck disclose the apparatus of claim 5, wherein said first media device is configured with command parsing routines (Streck, fig. 15, function control circuit 126, which runs a command parsing routine for identifying commands directed at a local device, col. 9, lines 50-55) for communicating selected commands, including commands not directed at first said media device, as received from said wireless remote control unit and communicated to said server over said PLC network (Edson teaches command data routed through the network from any media device is routed through the

gateway, col. 10, lines 46-65, and any media device also sends command data directly to the gateway, col. 11, lines 20-29).

Regarding claim 8, Edson and Streck disclose the apparatus of claim 2, wherein Edson teaches said media devices include television sets (fig. 1, TV 42), video monitors (fig. 1, TV 42), audio systems (fig. 1, audio system 31), computer devices (col. 8, lines 38-51), personal computers (fig. 1, PC 43), and video recording units (VCR, col. 7, lines 47-49 and/or PC 43 in fig. 1).

Regarding claim 9, Edson and Streck disclose the apparatus of claim 2, but fails to disclose means for encrypting and decrypting data communications between said server and said media devices over said PLC network.

The official notice taken that it is notoriously well known to provides means for encrypting and decrypting communications between devices over networks, for enhancing the security of communications over said network, was not traversed by the applicant, and is thus taken as an admission of the facts presented.

Therefore, it would have been obvious at the time to a person of ordinary skill in the art to modify the apparatus disclosed by Edson and Streck to include means for encrypting and decrypting data communications between said server and said media devices over said PLC network, for the benefit of enhancing the security of communications between devices over said network.

Regarding claims 10 and 11, Edson and Streck disclose the apparatus of claim 2, wherein said server is configured for receiving video and audio content from a cable connection (Edson, col. 6, lines 27-39).

Regarding claim 12-14, Edson and Streck disclose the apparatus of claim 2, and Edson further discloses a media storage element (fig. 2, hard disk drive 107) connected to said server for the retrieval of video and audio content for output from devices over said PLC network (used for data storage as well as the programming, col. 9, lines 9-15).

Regarding claims 15 and 16, Edson and Streck disclose the apparatus of claim 13, but fail to disclose an external communications link coupling said hard disk drive to said server that comprises an IEEE 1394 interface.

The official notice taken that it is notoriously well known in the art to utilize IEEE 1394 interfaces, otherwise known as "firewire", as a communication link between devices, as IEEE 1394 provides a standardized and high speed communications medium, was not traversed by the applicant, and is taken as an admission of the facts presented.

Therefore, it would have been obvious at the time to a person of ordinary skill in the art to modify the apparatus disclosed by Edson and Streck to include

an IEEE 1394 interface, for the benefit of utilizing a standardized and high speed communications medium between the hard disk drive and the server.

Regarding claim 19, Edson and Streck disclose the apparatus of claim 2, wherein select remote control operating commands, which are not utilized by said first media device receiving the commands from the remote control unit (Streck teaches distinguishing between commands for a TV and commands for a VCR, col. 9, lines 50-55), are routed (Streck teaches routing commands intended for a VCR to the VCR from a remote location, col. 6, lines 24-28) to a server for controlling additional devices operably coupled to said server (Edson teaches inter-device communications are performed by routing all commands through the server, gateway 13, col. 10, lines 46-65).

Regarding claim 20, Edson and Streck disclose the apparatus of claim 19, and additionally disclose an infrared mouse connected to said server for converting commands from said server into infrared commands configured for being received and interpreted by a media device having an infrared control port (Streck, fig. 10, repeater 40, col. 6, lines 24-41).

Regarding claim 21, Edson and Streck disclose the apparatus of claim 20, wherein said server is configured for sending commands over said infrared mouse to a media device not configured with a PLC interface (Edson teaches

communicating with devices configured for wireless networking, col. 7, lines 10-15 and col. 10, lines 46-65) in combination with controlling the receipt or transmission of video and audio streams from said media device (the gateway controls the operations of connected devices, col. 5, lines 36-44).

Regarding claim 27, Edson and Streck disclose the apparatus of claim 2, and additionally disclose means for controlling access within said PLC network (Edson, col. 9, lines 46-51).

Regarding claim 40, Edson discloses an apparatus configured for communicating video and audio streams over a power line communications network (PLC) in response to being remotely controlled by a server (any of the appliances shown fig. 1 connected to gateway 13 over power line 23), comprising:

A media device (fig. 1, TV 42) configured for outputting video and audio streams as a client under the direction of a server (one device is enabled for controlling another utilizing the gateway 13 to control the devices directly in a client-server model, such as inputting commands at the PC to control the TV, col. 7, lines 44-57);

A power line communications interface (fig. 1, device interface 322) coupled to said media device and configured for communicating commands as well as video and audio streams (col. 7 line 58 – col. 8 line 2); and

routing control commands received from a first media device to a second media device through a remote media server (col. 10, lines 46-65).

Edson fails to disclose means for wirelessly receiving control signals at said media device from a remote control unit and means for rerouting a portion of said control signals which have been received wirelessly at said media device from said remote control, said portion including those control signals which are not directed for use by said media device.

In an analogous art, Streck teaches a system for controlling plural devices in a home using a single remote control device (col. 6, lines 24-28) including means for rerouting a command (fig. 10, circuitry contained in unit 60', which reroutes remote control commands from wireless remote control 32, col. 6, line 24 – col. 7 line 3), received by a first media device from a wireless remote control device (fig. 10, wireless remote control device 32) through a home network (as shown in fig. 10, col. 6, lines 5-23) in response to recognizing that said command does not match commands specific to said first media device (col. 9 line 34 – col. 10 line 15, specifically col. 9, lines 50-55 where commands for the local TV are recognized and utilized, while commands for the VCR are rerouted over the network to the remotely located VCR, see also col. 6 line 63 – col. 7 line 3), for the benefit of allowing users to control a remotely located device within a home network from a remote location within the network (col. 6, lines 24-28).

It would have been obvious at the time to a person of ordinary skill in the art to modify the apparatus disclosed by Edson to include means for wirelessly

receiving control signals at said media device from a remote control unit and means for rerouting a portion of said control signals which have been received wirelessly at said media device from said remote control, said portion including those control signals which are not directed for use by said media device, as taught by Streck, for the benefit of allowing users to control remotely located devices within a home network from remote locations.

Regarding claim 41, Edson and Streck disclose the apparatus of claim 40, wherein the remote media is configured for controlling the communication of media streams over said PLC network (Edson, col. 5, lines 36-44).

Regarding claim 42, Edson and Streck disclose the apparatus of claim 41, wherein said media device coupled to said PLC network is configured for transmitting media content output in response to commands received from said media server (Edson teaches any device can control any other device in the network by sending command data through the network via the gateway, col. 15, lines 29-39, and further, Streck teaches the command data is specifically for outputting media content from a VCR to a TV in col. 6, lines 24-28, shown in fig. 10).

Regarding claims 43-44, Edson and Streck disclose the apparatus of claim 40, wherein said media device is a video display device (Edson, fig. 1, TV 42).

Regarding claim 45, Edson and Streck disclose the apparatus of claim 40, wherein said means for receiving control signals comprises an infrared receiver on said media device which is configured for receiving signals from an infrared remote control device (Streck, col. 6, lines 45-48).

Regarding claim 46, Edson and Streck disclose the apparatus of claim 45, wherein said means for communicating selected control signals comprises;

a circuit configured for receiving control signals (Edson, fig. 1, device interface 322); and

programming configured for,

recognizing that a command does not match commands directed at said media device (Streck, col. 9, lines 50-55); and

encoding said control signals which do not match commands directed at said media device upon said PLC network (Edson teaches commands to be sent over the home network are first encoded to the appropriate network protocol, col. 7 line 58 – col. 8 line 2) for receipt by another media device connected to said PLC network, wherein said signal do not match commands executed by the media device (as the commands are those that control the other media device,

such as sending a play or record command to a VCR through a TV as taught by Streck in col. 6, lines 24-28, or programming a microwave from a PC, as taught by Edson in col. 15, lines 29-39).

Regarding claim 47, Edson and Streck disclose the apparatus of claim 40, wherein Edson teaches multiple said media devices (fig. 1, appliance 41, TV 42, and PC 43) are connected to one another over a PLC network (fig. 1, power line 23) and configured for receiving operational commands from a media server (fig. 1, gateway 13) also coupled to said PLC network (devices share resources and send command signals to each other over the PLC network via the gateway, col. 8, lines 52-65 and col. 9, lines 52-63 and col. 10, lines 45-65).

Regarding claim 48, Edson discloses an apparatus configured for communicating video and audio streams over a power line communications network (fig. 1), comprising:

A media device (fig. 1, TV 42) configured for outputting video and audio streams as a client under the direction of a remote server communicating over a power line communication (PLC) interface (col. 9 line 64 – col. 10 line 6) with said media device (one device is enabled for controlling another utilizing the gateway 13 to control the devices directly in a client-server model, such as inputting commands at the PC to control the TV, col. 7, lines 44-57); and

A PLC interface (fig. 1, device interface 322) coupled to said media device configured for transferring digitally encoded streaming video and audio over a PLC network to said media device (col. 7 line 58 – col. 8 line 2); and

A server which is configured for controlling the operation of a second media device connected over said power line communications (PLC) network (fig. 1, gateway 13, col. 5, lines 36-44).

Edson fails to disclose a wireless communication interface coupled to said media device configured for receiving commands from a wireless remote control device and programming on said media device for interpreting a command code received from a wireless remote control device, recognizing that the command code does not match commands specific to said media device, and rerouting said command by passing said command through said power line communications (PLC) interface to said server.

In an analogous art, Streck teaches a system for controlling plural devices in a home using a single remote control device (col. 6, lines 24-28) including means for rerouting a command (fig. 10, circuitry contained in unit 60', which reroutes remote control commands from wireless remote control 32, col. 6, line 24 – col. 7 line 3), received by a first media device from a wireless remote control device (fig. 10, wireless remote control device 32) through a home network (as shown in fig. 10, col. 6, lines 5-23) in response to recognizing that said command does not match commands specific to said first media device (col. 9 line 34 – col. 10 line 15, specifically col. 9, lines 50-55 where commands for the local TV are

recognized and utilized, while commands for the VCR are rerouted over the network to the remotely located VCR, see also col. 6 line 63 – col. 7 line 3), for the benefit of allowing users to control a remotely located device within a home network from a remote location within the network (col. 6, lines 24-28).

It would have been obvious at the time to a person of ordinary skill in the art to modify the apparatus disclosed by Edson to include a wireless communication interface coupled to said media device configured for receiving commands from a wireless remote control device and programming on said media device for interpreting a command code received from a wireless remote control device, recognizing that the command code does not match commands specific to said media device, and rerouting said command by passing said command through a home network, as taught by Streck, for the benefit of allowing users to control remotely located devices within a home network from remote locations.

Regarding claim 49, Edson and Streck disclose the apparatus of claim 48, and further discloses means for receiving operating commands over said PLC interface from other devices communicating over said PLC network (Edson, fig. 1, device interface 322), wherein said operating commands comprise commands directing media output for said media device (Edson teaches devices are configured for receiving control commands from the network, col. 15, lines 29-39,

wherein the TV and VCR appliances input and output media to and from the network, col. 7, lines 44-57).

Regarding claim 53, Edson and Streck disclose the apparatus of claim 48, and further discloses means for executing a plug-in-play interface for communication operating parameters of said media device over said PLC interface (Edson, col. 11, lines 3-19).

Regarding claim 54, Edson and Streck discloses the apparatus of claim 48, wherein said media device is a video playback device (Edson, fig. 1, TV 42).

Regarding claim 59, Edson and Streck disclose the apparatus of claim 1, wherein said means for rerouting commands comprises:

programming within said first media device (Streck, fig. 15, function control circuit 126) for,

parsing commands received from said wireless remote control device (Streck, fig. 15, function control circuit 126, runs a command parsing routine for identifying commands directed at a local device, col. 9, lines 50-55),

recognizing remote control commands received wirelessly that are not directed at controlling said first media device (Streck teaches commands that are intended for the VCR have additional data that identifies them as such, and are not utilized when received by the TV, col. 9, lines 34-55), and

rerouting said command not directed at control said first media device (as shown by Streck in fig. 10, commands for the VCR received at the TV are rerouted to the VCR, col. 6, lines 24-28) over the power line communications network to other devices (Edson, fig. 1, power line 23, wherein commands are routed through the server to other devices, col. 10, lines 46-65).

Regarding claims 60-62, Edson and Streck disclose the apparatus of claims 2, 7, and 40, wherein said first media device is a television (Edson, fig. 1, TV 42) configured for wirelessly received command from a wireless remote control device (Streck, wireless remote control 32 in fig. 10) to control aspects of local viewing in response to a receipt of a first portion of commands from the wireless remote control device (Streck, the first set of buttons for controlling TV functions, col. 9, lines 34-55); and

wherein a second portion of the commands received from said remote control device are not executed by said television set (Streck, the second set of buttons for controlling VCR functions) but instead are rerouted by the television (as shown in fig. 11, wherein the rerouting circuitry is embedded in the television, col. 6 line 24 – col. 7 line 3) over said power line communication (PLC) network (Edson, fig. 1, power line 23) for receipt by a server (Edson, fig. 1, gateway 13) which interprets the command to control operations of the server (Edson, col. 11, lines 20-29) or other media device (Edson, col. 7, lines 44-57).

Art Unit: 2623

4. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edson and Streck as applied to claim 2 above, and further in view of Filisan (WO 99/37092, of record).

Regarding claim 17, Edson and Streck disclose the apparatus of claim 2, but fail to disclose means for isolating a virtual network portion of said PLC network from other virtual network portions sharing a single physical power line distribution transformer.

In an analogous art, Filisan teaches means (fig. 3, filters 15) for isolating portions of a network from other network portions (page 5, lines 9-22) that share a single source (fig. 3, mixer 3), isolating network portions so that the signals on them are only accessible by those who wish to receive them.

It would have been obvious at the time to a person of ordinary skill in the art to modify the apparatus disclosed by Edson and Streck to include means for isolating virtual network portions of the network from other portions sharing a single physical distribution transformer, as taught by Filisan, for the benefit of isolating network portions so that the signals on them are only accessible by those who wish to receive them, and block from those who do not.

Regarding claim 18, Edson, Streck, and Filisan disclose the apparatus of claim 17, wherein said means for isolating said virtual network portion comprises a blocking filter connected to the power line for isolating portions of said physical power line from one another (Filisan, page 5, lines 9-12).

5. Claims 22-24, and 50-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edson and Streck as applied to claims 2 and 48 above, and further in view of Manis et al. (US 2004/0006484 A1, of record) [Manis].

Regarding claims 22, 50, and 51, Edson and Streck disclose the apparatus of claims 2 and 48, but fail to disclose means for adjusting decoding latency between media devices connected to said PLC network to synchronize output timing.

In an analogous art, Manis teaches a means for adjusting decoding latency between media devices connected to a PLC network to synchronize output timing (paragraphs 19 and 32), ensuring the outputs of the devices are synchronized when reproducing content.

It would have been obvious at the time to a person of ordinary skill in the art to modify the apparatus disclosed by Edson to include means for adjusting decoding latency between media devices connected to said PLC network to synchronize output timing, as taught by Manis, for the benefit of ensuring the outputs of the audio and video media devices are synchronized when displaying an audio/visual presentations for optimal viewer enjoyment.

Regarding claim 23, Edson, Streck, and Manis disclose the apparatus of claim 22, and additionally disclose said means for adjusting decoding latency is executed by said server for controlling decoding delay within said media devices

Art Unit: 2623

configured for connection to said PLC network (Manis, fig. 1, source 6, paragraph 19).

Regarding claims 24 and 52, Edson, Streck, and Manis disclose the apparatus of claims 22 and 51, wherein said means for adjusting decoding latency comprises increasing or decreasing the buffering of streams for devices to change the decoding delay (Manis, paragraphs 35 and 36, wherein speakers which receive data more quickly than others subsequently increase the buffering of streams in response to the timing beacon).

6. Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edson and Streck as applied to claim 2 above, and further in view of Ostrover (6,351,596, of record).

Regarding claim 25, Edson and Streck disclose the apparatus of claim 2, but fail to disclose means for live pausing of content being viewed, wherein after un-pausing play the programming can be viewed without loss.

In an analogous art, Ostrover teaches utilizing personal video recorders (the commercially available ReplayTV and TiVo, col. 4, lines 35-44) which allow for the pausing of live broadcasts by using hard drives to digitally store content as it is received, so that a user may pause a live broadcast and resume watching later it without loss, as the material is constantly recorded on said hard drive.

It would have been obvious at the time to a person of ordinary skill in the art to modify the apparatus disclosed by Edson and Streck to include means for live pausing of content being viewed, wherein after un-pausing play the programming can be viewed without loss, as taught by Ostrover, for the benefit of allowing users to watch live broadcasts with the same freedom and flexibility benefits of recorded programming.

Regarding claim 26, Edson disclose the apparatus of claim 25, wherein said means for live pausing stores content upon a storage device for delayed playback and while paused continues to store the programming for later resumption from the paused location (these are operational characteristics of the disclosed ReplayTV and TiVo systems).

7. Claims 28, 30, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edson and Streck as applied to claims 2 and 27 above, and further in view of Gray et al. (US 2004/0163130 A1, of record) [Gray].

Regarding claim 28, Edson and Streck disclose the apparatus of claim 27, but fail to disclose parental controls are established for limiting content access by password.

In an analogous art, Gray teaches controlling access to content using a password protected parental control feature (paragraph 38, password protected

parental control of a set top box), providing the benefit of allowing parents to control the content presented to children.

It would have been obvious at the time to a person of ordinary skill in the art to modify the apparatus disclosed by Edson and Streck to include controlling access to content using a password protected parental control feature, as taught by Gray, for the benefit of allowing parents to control the content presented to children.

Regarding claim 30, Edson and Streck disclose the apparatus of claim 2, but fail to disclose means for locking the operations of a first media device for which commands have been received from a second media device, said locking preventing media devices other and said second media device from altering the operations of said first media device.

In an analogous art, Gray teaches locking the operations of a first media device for which commands have been received from a second media device (the second media device, the controlling PC, paragraph 28, enables parental control features which locks the operations of a second media device, the home set top boxes, paragraphs 38 and 39), said locking preventing media devices other and said second media device from altering the operations of said first media device (as said parental control feature is only available from the second media device, the PC, paragraph 39), for the benefit of providing parental control features over media devices.

It would have been obvious at the time to a person of ordinary skill in the art to modify the apparatus of Edson and Streck to include means for locking the operations of a first media device for which commands have been received from a second media device, said locking preventing media devices other and said second media device from altering the operations of said first media device, as taught by Gray, for the benefit of providing parental control features over media devices which many parents desire which enables them to control the content available to their children.

Regarding claim 31, Edson, Streck and Gray disclose the apparatus of claim 30, wherein said means for locking may be bypassed utilizing a password (Gray teaches the parental control feature is password protected, paragraph 38).

8. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Edson, Streck, and Gray as applied to claim 27 above, and further in view of Ellis (US 2004/0103434 A1, of record).

Regarding claim 29, Edson, Streck, and Gray disclose the apparatus of claim 28, but fail to disclose multiple levels of content limits are established.

In an analogous art, Ellis teaches establishing multiple levels of content limits (parental controls that are based upon rating, paragraph 72), allowing for a fine granularity in controlling access to content on a media device.

It would have been obvious at the time to a person of ordinary skill in the art to modify the apparatus disclosed by Edson, Streck, and Gray to include establishing multiple levels of content limits, as taught by Ellis, for the benefit of allowing for a fine granularity in controlling access to content by parents on a media device.

9. Claims 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edson and Streck as applied to claim 2 above, and further in view of Gerszberg et al. (US 2002/0012353 A1, of record) [Gerszberg].

Regarding claims 32 and 33, Edson and Streck disclose the apparatus of claim 2, but fail to disclose means for controlling and prioritizing the portion of said bandwidth to be utilized by a given media device configured for communication over said PLC network with said server.

In an analogous art, Gerszberg teaches a home network system (fig. 1, customer premises equipment 10 and 22) wherein the amount of bandwidth made available to each of the media devices is controlled and prioritized by a central server (fig. 1, ISD 22, paragraph 60), efficiently utilizing the available bandwidth over the network.

It would have been obvious at the time to a person of ordinary skill in the art to modify the apparatus disclosed by Edson and Streck to include means for controlling and prioritizing the portion of said bandwidth to be utilized by a given media device configured for communication over a network with said server, as

taught by Gerszberg, for the benefit of efficiently utilizing the limited available bandwidth over the PLC network.

10. Claims 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edson and Streck as applied to claim 2 above, and further in view of Na (5,296,931, of record).

Regarding claims 34 and 35, Edson and Streck disclose the apparatus of claim 2, but fail to disclose means for communicating multiple video and audio streams to a given media device from said server and configured for displaying picture in picture.

In an analogous art, Na teaches receiving plural audio-visual streams at a given media device from a common source which are configured for display using picture in picture (col. 3, lines 38-62 and col. 4 line 66 – col. 5 line 2) enabling a user to view two channels at once.

It would have been obvious at the time to a person of ordinary skill in the art to modify the apparatus disclosed by Edson and Streck to include means for communicating multiple video and audio streams to a given media device from said server and configured for displaying picture in picture, as taught by Na, for receiving two channels at once, for the benefit of enabling a user to view two channels at once, which assists in finding new content while maintaining the display of the original channel (enhanced channel surfing).

Art Unit: 2623

11. Claims 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edson and Streck as applied to claim 2 above, and further in view of Bullock et al. (6,246,868, of record) [Bullock].

Regarding claim 36, Edson and Streck disclose the apparatus of claim 2, but fails to disclose an AC adapter configured for powering an electronic device unable to operate directly from AC line power.

In an analogous art, Bullock teaches an apparatus which utilizes AC adapters configured for powering electronic devices which are unable to operate directly from AC line power (extension units 102 operate to allow telephone equipment to operate using AC lines, col. 3, lines 5-34), for the benefit of providing dynamic telephone service in locations where little or no availability exists for dedicated telephone wires (col. 1, lines 12-15 and col. 4, lines 2-9).

It would have been obvious at the time to a person of ordinary skill in the art to modify the apparatus disclosed by Edson and Streck to include an AC adapter configured for powering an electronic device unable to operate directly from AC line power, as taught by Bullock, for the benefit of providing dynamic telephone service in homes and other locations which use AC power line wiring but where little or no availability exists for dedicated telephone wires.

Regarding claim 37, Edson, Streck, and Bullock disclose the apparatus of claim 36, wherein said AC adapter is configured for communicating data between said electronic device and devices coupled to the AC power line (Bullock teaches

the adapter also handles computer modem communications, col. 4, lines 10-16), wherein said AC power line is to be utilized as a power communications network (Bullock, col. 2 line 57 – col. 3 line 4).

Regarding claims 38 and 39, Edson, Streck, and Bullock disclose the apparatus of claim 37, wherein said electronic device unable to operate directly from AC line power is a portable device (telephones are portable devices).

### ***Conclusion***

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in

Art Unit: 2623

such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

### **Certificate of Mailing**

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

on \_\_\_\_\_.  
(Date)

Typed or printed name of person signing this certificate:

\_\_\_\_\_

Signature: \_\_\_\_\_

### **Certificate of Transmission**

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, Fax No. (703) \_\_\_\_\_ - \_\_\_\_\_ on \_\_\_\_\_.  
(Date)

Typed or printed name of person signing this certificate:

\_\_\_\_\_

Signature: \_\_\_\_\_

Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dominic D. Saltarelli whose telephone number is (571) 272-7302. The examiner can normally be reached on Monday - Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dominic Saltarelli  
Patent Examiner  
Art Unit 2611

DS



JOHN MILLER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600